

Bruhat Bangalore Mahanagara Palike
Executive Engineer Yelahanka Division

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Name of Work: Modified Estimate For Improvements to roads and Drains at Viswanagara
in ward no-03 of Yelahanka Satellite Town Sub Division

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Civil Work								
1	KSRRB 300-1. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications(I No-19.1, P No-143), 8km lead								
	RCC Drain								
	Viswanagara								
	Cross Rd-1(#42-Rekha House)		2	68.90	1.10	0.90	136.42		
	Cross Rd-2		1	89.70	1.10	0.90	88.80		
	Cross Rd-3		2	34.00	1.10	0.90	67.32		
							292.55	225.38	65,933.79
	Approved Rate Rs. =	225.38							
	Filling in foundation with granite/trap broken metal 100mm and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with lead up to 50m and lift 1.5m complete as per specifications. Data Rate								
				Area					
2	a) 40mm Jelly	Cum	5	0.31	0.40		0.00	1990.16	0.00
	Data rate	1990.16							
3	b) 20mm Jelly	Cum	5	0.31	0.40		0.00	1990.16	0.00
	Data rate	2775.33							
4	c) Coarse sand	Cum	5	0.31	0.30		0.00	2775.33	0.00
	Data rate	2775.33							
5	d) Fine Sand	Cum	5	0.31	0.20		0.00	2775.33	0.00
	Data rate	1990.16							
6	e) 12.5mm chips	Cum	5	0.31	0.30		0.00	1990.16	0.00
7	Supplying, laying and jointing HDPE pipes of specified grade and conforming to IS 4984- 995 with latest amendments and conveying to work site including loading and unloading at both destinations and rolling and lowering into trenches, laying true to line and jointing of pipes and specials, giving hydraulic test as per relevant ISS with all lead and lifts including encasing the pipe around to a depth of not less than 15 cms. with soft gravel or selected earth available from the excavation, testing and commissioning. The rate is exclusive of required specials and fittings wherever necessary like saddle Tee, stub ends, flanged sets, bends, reducers etc. complete (Contractor will make his own arrangements for procuring water for testing) etc. for : HDPE Grade PE80-PN6.0, 630 mm dia. (Perforated Pipe for Rain Water Harvesting Pit) (BWSSB SR 2017-18, Pg No 121 Item No. 1.17 Code No. K010Q)								
	0.63m dia HDPE Perforated		5	1.80			0.00		
	Approved Rate Rs. =	11329.89					0.00		
							0.00	11329.89	0.00
8	Providing of Geonets for Rain Water Harvesting pit on top of the filter media as specified in drawings or as approved by Engineer Incharge. Data Rate								

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
				Area					
			5	0.31			0.00	74.36	0.00
	Approved Rate Rs. =	74.36							
9	KSRRB M2100-10. Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. (P.No-222, I No-27.18)								
	RCC Drain								
	Viswanagara								
	Cross Rd-1(#42-Rekha House)		2	68.90	1.10	0.15	22.74		
	Cross Rd-2		1	89.70	1.10	0.15	14.80		
	Cross Rd-3		2	34.00	1.10	0.15	11.22		
	CC Road								
	Viswanagara								
	Connecting Road		1	38.30	8.60	0.15	49.41		
	Dead End Road		1	49.50	6.55	0.15	48.63		
	3rd Cross Rd		1	48.30	5.40	0.15	39.12		
	2nd Cross Rd		1	50.20	3.50	0.15	26.36		
	M-block Surrounding		1	16.30	4.50	0.15	11.00		
	Approved Rate Rs. =	5676.19					223.28	5676.19	1267372.61
10	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. With 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centring shuttering cost of material HOM of machinery curing etc., complete excluding cost of steel as per MORTH specification no. 1500, 1700, 2200 including cost of material labour HOM complete as per specification. (P.No. 271, I No.37.59.2 of PW, P&I WTD S.R 2018-19)								
	RCC Drain								
	Raft								
	Viswanagara								
	Cross Rd-1(#42-Rekha House)		2	68.90	0.90	0.15	18.60		
	Cross Rd-2		1	89.70	0.90	0.15	12.11		
	Cross Rd-3		2	34.00	0.90	0.15	9.18		
	Wall								
	Viswanagara								
	Cross Rd-1(#42-Rekha House)		4	68.90	0.15	0.60	24.80		
	Cross Rd-2		2	89.70	0.15	0.60	16.15		
	Cross Rd-3		4	34.00	0.15	0.60	12.24		
	Approved Rate Rs. =	7401.79					93.08	7401.79	688977.12
							93.08		

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
11	KSRRB - M2300-14: Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebtrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.MORTH Specification No. 1600 & 2200 for TMT bars Fe 500. (P No.239, I.No 29.29.2 of PW, P&IWD S.R 2018-19)								
	RCC Drain								
	For Drain 60kg/cum			93.08	0.06		5.58		
							~~5.58~~	69840.96	390058.27
	Approved Rate Rs. =	69840.96							
12	Providing and Fixing pre cast covering Slab 100mm thick made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transpotation etc ,complete.As per Engineer incharge. (Data Rate)								
	RCC Drain								
	Viswanagara								
	Cross Rd-1(#42-Rekha House)		2	68.90	0.90		124.02		
	Cross Rd-2		1	89.70	0.90		80.73	80.10	
	Cross Rd-3		2	34.00	0.90		61.20		
							265.95	2446.61	650675.93
	Approved Rate Rs. =	2446.61					~~265.95~~		649134.56
13	Providing and fixing RCC precast cover slab of 250mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
							0.00	5672.10	0.00
	Approved Rate Rs. =	5672.10							
14	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 8km lead= (I No-19.14,P No-143,KPWD SR 2018-19)								
	Viswanagara								
	Rajivgandhinagar								
	Main rd								
			2	330.00	2.40	0.20	316.80		
	Approved Rate Rs. =	66.94					316.80	66.94	21,206.59
15	KSRRB 300-46. Scarifying by mechanical means stone metal crust 50mm to 100mm thick by along with 20mm premix carpet / surface dressing and stacking of old serviceable materials including cost of all labour charges, HOM complete as per specifications.(P.No-146,I No-19.52)								
	Approved Rate Rs. =	43.28					0.00	43.28	0.00
16	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications Clause 401 of MORTH V Revision.(I No-20.5,P No-153)								
	Overlay cut portion								
	Viswanagara								

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Rajivgandhinagar								
	Main rd		2	330.00	2.40	0.15	237.60		
							~~237.60~~	~~2088.48~~	~~496222.85~~
	Approved Rate Rs.=	2088.48							
17	KSRRB M400-17. Providing, laying, spreading and compacting cushioned stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18)								
	Overlay cut portion								
	Viswanagara								
	Rajivgandhinagar								
	Main rd		2	330.00	2.40	0.23	364.32		
							~~364.32~~	~~2095.14~~	~~763301.40~~
	Approved Rate Rs.=	2095.14							
18	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision(P.No-158,I No-21.6), issue rate dated 01-07-2020								
	Overlay cut portion								
	Viswanagara								
	Rajivgandhinagar								
	Main rd		2	330.00	2.40		1584.00		
							~~1584.00~~	~~31.07~~	~~49,214.88~~
	Approved Rate Rs.=	31.07							
19	KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM complete as per specifications.(P.No-158,I No-21.2), issue rate dated 01-07-2020								
	TC- PC area								
							1221.00		
							~~1221.00~~	~~5.55~~	~~6,776.55~~
	Approved Rate Rs.=	5.55							
20	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications (P.No-161,I No-21.7) issue rate dated 01-07-2020								
	Overlay cut portion								
	Viswanagara								
	Rajivgandhinagar								
	Main rd		1	330.00	8.50		2805.00		
							~~2805.00~~	~~13.32~~	~~37,362.60~~
	Approved Rate Rs.=	13.32							
21	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revision using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No-160,I No-21.17.6), issue rate dated 01-07-2020								
	Overlay cut portion								
	Viswanagara								

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Rajivgandhinagar						79.20		
	Main rd		2	330.00	2.40	0.05	79.20	6708.22	531291.02
	Approved Rate Rs.=	6708.22							
22	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015. using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminous binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic)(P.No-171,I No-21.78.12), issue rate dated 01-07-2020								
	Overlay cut portion								
	Viswanagara								
	Rajivgandhinagar								
	Main rd		1	330.00	8.50	0.04	112.20		
							112.20	7891.18	885390.40
	Approved Rate Rs.=	7891.18							
23	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)								
	Overlay cut portion								
	Viswanagara								
	Rajivgandhinagar								
	Main rd		2.5	330.00	0.10		82.50		
							82.50	476.07	39,275.78
	Approved Rate Rs =	476.07							
24	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials separately complete as per specifications. Loading and unloading with 8km lead= (I No-18.47,P No-140,KPWD SR 2018-19)								
	C.C Road								
	Viswanagara								
	Connecting Road								
	Dead End Road		1	38.30	8.60	0.20	65.88		
	3rd Cross Rd		1	49.50	6.55	0.20	64.85		
	2nd Cross Rd		1	48.30	5.40	0.20	52.16		
	M-block Surrounding		1	50.20	3.50	0.20	35.14		
	1st Cross Rd		1	16.30	4.50	0.20	14.67		
	A-block surrounding		1	56.30	4.30	0.20	48.42		
	Flag Hosting		1	41.20	4.10	0.15	25.34		
	Samudhaya Bhavan		1	3.30	2.90	0.15	1.44		
	Back Side								
	Corner Side		1	19.00	1.80	0.15	5.13		
	Front Side		1	11.00	1.55	0.15	2.56		
	Slum Area		1	10.70	9.90	0.15	15.89		

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Road-1		1	9.40	2.70	0.15	3.81		
	Road-2		1	4.40	1.80	0.15	1.19		
	Road-3		1	4.00	1.65	0.15	0.99		
	Road-4		1	4.00	1.70	0.15	1.02		
	Road-5		1	6.50	2.30	0.15	2.24		
	Road-6		1	10.00	1.30	0.15	1.95		
	Road-7		1	3.00	2.10	0.15	0.95		
	Main Road		1	79.10	4.10	0.15	48.65		
							~~392.25~~	~~1019.07~~	~~399732.76~~
	Approved Rate Rs. =	1019.07							

25 Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum, Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rakers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, including groove cutting charges, joint filler, separation membrane of impermeable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to (P.No-176, I No-22 6.1)

C.C Road									
Viswanagara									
Connecting Road		1	38.30	8.60	0.150	49.41			
Dead End Road		1	49.50	6.55	0.150	48.63			
3rd Cross Rd		1	48.30	5.40	0.150	39.12			
2nd Cross Rd		1	50.20	3.50	0.150	26.36			
M-block Surrounding		1	16.30	4.50	0.150	11.00			
1st Cross Rd		1	56.30	4.30	0.150	36.31			
A-block surrounding		1	41.20	4.10	0.150	25.34			
Flag Hosting		1	3.30	2.90	0.150	1.44			
Samudhaya Bhavan									
Back Side		1	19.00	1.80	0.125	4.28			
Corner Side		1	11.00	1.55	0.125	2.13			
Front Side		1	10.70	9.90	0.125	13.24			
Slum Area									
Road-1		1	9.40	2.70	0.125	3.17			
Road-2		1	4.40	1.80	0.125	0.99			
Road-3		1	4.00	1.70	0.125	0.85			
Road-4		1	4.00	1.70	0.125	0.85			
Road-5		1	6.50	2.30	0.125	1.87			
Road-6		1	10.00	1.30	0.125	1.63			
Road-7		1	3.00	2.10	0.125	0.79			
Main Road		1	79.10	4.10	0.150	48.65			
						~~316.05~~			
Approved Rate Rs =	5455.35								
EIRL								~~5455.35~~	~~1724141.55~~

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
E1	KSRB 4-1.3 : Providing and laying in position plain cement concrete of Mix 1:4:8 with OPC @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM curing complete as per specifications.								
	C.C Road								
	Samudhaya Bhavan								
	Back Side		1	19.00	1.80	0.15	5.13		
	Corner Side		1	11.00	1.55	0.15	2.56		
	Front Side		1	10.70	9.90	0.15	15.89		
	Slum Area								
	Road-1		1	9.40	2.70	0.15	3.81		
	Road-2		1	4.40	1.80	0.15	1.19		
	Road-3		1	4.00	1.70	0.15	1.02		
	Road-4		1	4.00	1.70	0.15	1.02		
	Road-5		1	6.50	2.30	0.15	2.24		
	Road-6		1	10.00	1.30	0.15	1.95		
	Road-7		1	3.00	2.10	0.15	0.95		
	Main Road		1	79.10	4.10	0.15	48.65		
	1st Cross Rd		1	56.30	4.30	0.15	36.31		
	A-block surrounding		1	41.20	4.10	0.15	25.34		
	Flag Hosting		1	3.30	2.90	0.15	1.44		
							147.48	5408.12	797605.76
	Basic Rate Rs. =	5102.00							
	Area weightage Rs. =	306.12							
	Total rateRs. =	5408.12							
E2	Providing and fixing pre cast solid cement concrete kerb stones made out of C.C. 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc., complete.								
	Nos								
	Viswanagara								
	Cross Rd-1(#42-Rekha House)		2	68.85			137.70		
	Opp To Cross Rd-1 Rd		2	76.50			153.00		
	Connecting Road		1	24.00			24.00		
	Samudhaya Bhavan								
	Back Side		1	19.00			19.00		
	Corner Side		1	11.00			11.00		
							344.70		
	Basic Rate Rs. =	408.00					766.00	m	
	Area weightage Rs. =	24.48					766.00	Nos	
	Total rateRs. =	432.48					766.00	432.48	331279.68
E3	KSRRB 800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications.								
	Sqm								
	Viswanagara								

